

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

**SECTION I: BACKGROUND INFORMATION**

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**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 13-May-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Kansas City District, NWK-2008-00817-JD2

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : KS - Kansas  
County/parish/borough: Cloud  
City:  
Lat: 39.59803218  
Long: -97.6544025  
Universal Transverse Mercator: []  
Name of nearest waterbody: Cool Creek  
Name of nearest Traditional Navigable Water (TNW): Republican River  
Name of watershed or Hydrologic Unit Code (HUC): Lower Republican - 10250017

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**

Office Determination Date: 13-May-2008

Field Determination Date  
(s):

**SECTION II: SUMMARY OF FINDINGS**

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**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There  "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There  "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
08-817-2	Non-RPWs that flow directly or indirectly into TNWs

**b. Identify (estimate) size of waters of the U.S. in the review area:**

Area: 1456 (m<sup>2</sup>)

Linear: 880 (m)

**c. Limits (boundaries) of jurisdiction:**

based on: Established by  
OHWM.

OHWM Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

### SECTION III: CWA ANALYSIS

#### A. TNWs AND WETLANDS ADJACENT TO TNWs

##### 1. TNW

Not Applicable.

##### 2. Wetland Adjacent to TNW

Not Applicable.

#### B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

##### 1. Characteristics of non-TNWs that flow directly or indirectly into TNW

###### (i) General Area Conditions:

Watershed size: 1093 acres  
 Drainage area: 1093 acres  
 Average annual rainfall: 29 inches  
 Average annual snowfall: 21 inches

###### (ii) Physical Characteristics

###### (a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are 1 (or less) river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project Waters are 1 (or less) aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial(straight) miles from RPW.

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

This unnamed tributary to Cool Creek (nonRPW) flows into Cool Creek (RPW) at the project location. Cool Creek then flows approximately 0.7 miles to the Republican River (TNW).

###### Tributary Stream Order, if known:

Order	Tributary Name
2	08-817-2

###### (b) General Tributary Characteristics:

###### Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
08-817-2	X	-	-	-	-

###### Tributary properties with respect to top of bank (estimate):

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
08-817-2	6	2	Vertical (1:1 or less)

###### Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
08-817-2	X	X	-	-	X	-	-	-	-

###### Tributary (conditions, stability, presence, geometry, gradient):

Tributary Name	Condition/Stability	Run/Riffle/Pool Complexes	Geometry	Gradient (%)
08-817-2	-	-	Meandering	1

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
08-817-2	Intermittent but not seasonal flow	11-20	Random flow regime generated by presumed groundwater influences and precipitation runoff.	Duration and volume are dependent upon water table, soil saturation and precipitation. With almost 1100 acres of drainage and close proximity to TNW, it is anticipated that potential duration and volume are sufficient to impact downstream TNWs

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
08-817-2	Confined	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
08-817-2	-	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
08-817-2	X	-	-	-

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

**High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Tributary Name	Explain	Identify specific pollutants, if known
08-817-2	-	-

**(iv) Biological Characteristics. Channel supports:**

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
08-817-2	X	Narrow timber alignment throughout much of the reach. The average width within the 2nd order reach is estimated to be 40 feet. The remaining adjacent lands consist primarily of cropland.	-	-	X

**Habitat for: (as indicated above)**

Tributary Name	Habitat	Federally Listed Species	Explain Findings	Fish\Spawn Areas	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic/Wildlife Diversity	Explain Findings
08-817-2	X	-	-	-	-	-	-	X	This meandering stream and its adjacent riparian areas function in the contribution to aquatic habitat through hydrologic connectivity and intermittent flows, trophic strata, and refuge for semi-aquatic and terrestrial wildlife.

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW****(i) Physical Characteristics:****(a) General Wetland Characteristics:****Properties:**

Not Applicable.

**(b) General Flow Relationship with Non-TNW:****Flow is:**

Not Applicable.

**Surface flow is:**  
Not Applicable.

**Subsurface flow:**  
Not Applicable.

**(c) Wetland Adjacency Determination with Non-TNW:**  
Not Applicable.

**(d) Proximity (Relationship) to TNW:**  
Not Applicable.

**(ii) Chemical Characteristics:**  
**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**  
Not Applicable.

**(iii) Biological Characteristics. Wetland supports:**  
Not Applicable.

**3. Characteristics of all wetlands adjacent to the tributary (if any):**  
**All wetlands being considered in the cumulative analysis:**  
Not Applicable.

**Summarize overall biological, chemical and physical functions being performed:**  
Not Applicable.

## C. SIGNIFICANT NEXUS DETERMINATION

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A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

### Findings for: 08-817-2

Taking into consideration the large drainage area, the average precipitation, and the close proximity to the downstream TNW, this 2nd order stream has a capacity to carry pollutants downstream into the TNW. The stream and riparian area provide a significant water filtration function to the downstream waterbodies, including the TNW. The wooded riparian area provides rapid filtration of inorganic nitrogen and other contaminants present in the adjacent farm fields. Considering the large drainage area, the meandering stream and its riparian area also provide a significant role in retarding the erosive power of flood waters before they reach the downstream TNW. Even minor changes in flow velocities can disrupt the equilibrium of downstream waters, causing a chain reaction of channel degradation or aggradation all the way down to the TNW. These affects could result in large adjustments in channel dimensions, loss of stream habitat and diversity, and damage delicate food webs resulting in considerable impacts to the chemical, physical, and biological integrity of the downstream TNW. The large drainage area of this stream also supports the recharge of the downstream rivers including the TNW, which is vital to downstream aquatic life. The tributary and its riparian area provide in-stream habitat, food, and refuge for wildlife enhancing the biological integrity of the downstream TNWs. In conclusion, this stream has a significant chemical, physical and biological nexus to the downstream TNW.

## D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/ WETLANDS ARE:

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**1. TNWs and Adjacent Wetlands:**  
Not Applicable.

**2. RPWs that flow directly or indirectly into TNWs:**  
Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**  
Not Applicable.

**3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>**  
Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Tributary Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
08-817-2	Non-RPWs that flow directly or indirectly into TNWs	-	1456.86816
<b>Total:</b>		<b>0</b>	<b>1456.86816</b>

**4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable.

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:<sup>10</sup>**

Not Applicable.

**Identify water body and summarize rationale supporting determination:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

**F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS**

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

Other (Explain):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**

Not Applicable.

**Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.**

Not Applicable.

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD**

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS NHD data	-	-
--U.S. Geological Survey map(s).	-	-
--Photographs	-	-
----Aerial	-	-
--Other information	-	-

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**

## Description

This reach supports quality riparian habitat.

- 1-Boxes checked below shall be supported by completing the appropriate sections in Section III below.
- 2-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least  $\frac{1}{2}$  seasonally (e.g., typically 3 months).
- 3-Supporting documentation is presented in Section III.F.
- 4-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
- 5-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
- 6-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
- 7-Ibid.
- 8-See Footnote #3.
- 9 -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
- 10-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.